Version 3.0

TL21 PROGRAMMER

USER MANUAL

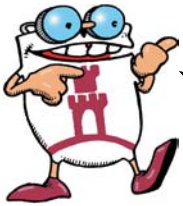
Version 3.0
Date: September 2004
English Edition

Azkoyen Medios de Pago, S. A. hereby reserves the right to introduce, without prior notice, any technical improvements derived from its constant research.

The names of the products and the companies included or represented herein are the registered trademarks of their respective owners.

Contents

1. Introduction ---------- 5
2. The TL21 Programmer ---------- 6
2.1 Presentation of the Basic Kit ---------- 6
2.2 General Description of the TL21 ---------- 7
2.3 Functions of the TL21 Programmer ---------- 9
2.3.1 Description of the TL21 Programmer Functions --- 10
TURNING ON WITHOUT THE POWER ADAPTER ---------- 10
PROGRAMMING ---------- 11
ADJUSTMENTS ---------- 12
CONFIGURATION ---------- 12
FIRMWARE ---------- 13
IDENTIFY MECHANISM ---------- 13
CONNECT TO PC ---------- 15
EXACTOR PAYOUT UNIT INTERFACE ---------- 16
OPTIONS ---------- 17
TURNING ON WITH THE POWER ADAPTER ---------- 22
TURN OFF THE TL21 ---------- 23
2.4 Operating Mode ---------- 24
2.4.1 Obtaining Data ---------- 24
PRIOR REQUISITES ---------- 24
THE PROCESS OF OBTAINING DATA ---------- 25
2.4.2 Coin Validator and Payout Unit Exactor Reprogramming 25
CONNECTION TO THE COIN VALIDATOR ---------- 25
CONNECTION TO THE EXACTOR PAYOUT UNIT ---------- 26
PROGRAMMING (REFERENCE NUMBER) ---------- 27
ADJUSTMENTS ---------- 28
CONFIGURATION ---------- 29
DOWNLOAD FIRMWARE ---------- 30
REPROGRAMMING PROCESS ---------- 31
CONNECTION TO THE PAYOUT UNIT ---------- 34
2.4.3 Reprogramming AN-8000 Payout Units ---------- 34
PROCESS OF REPROGRAMMING THE PAYOUT UNIT ----- 35
THE PROCESS OF REPROGRAMMING
THE ASSOCIATED COIN VALIDATOR ---------- 37
2.4.4 Reading of Adjustments and Configurations -------- 39
2.5 Complements and Accessories ---------- 41
2.6 List of Complements and Accessories ---------- 45
3. Obtaining Files Via Internet (Web page & e-mail) ---------- 47
3.1 User Validation ---------- 47
3.2 Request for Files ---------- 49
3.3 Other Operations ---------- 53



ATTENTION!

THIS MANUAL IS ONLY FOR TL21's THAT INCORPORATE VERSION 2.0 OF THE OPERATING SOFTWARE.

PREVIOUS MODELS MUST CONTINUE TO USE THE MANUAL FOR VERSION 1.2 OR VERSION 2.0

1. INTRODUCTION

The **Portable Remote Programmer for Coin Validators and Payout Units** (Hereafter the **TL21**) is an autonomous, portable, and easily managed system conceived and designed to facilitate reprogramming and communication with the Coin Validators and Payout units manufactured by **AZKOYEN,** "at the machine".

For reprogramming with the **TL21**, it is not necessary to use any kind of coin or token, given that its technology is based on the Coin Validator calibration.

What is the calibration?

During the manufacturing process, Coin Validators are checked one by one, and the data obtained from this check are collected in a large database. These data will subsequently serve to prepare new coin **PROGRAMMING** exactly according to each Coin Validator, without the need to use coins or tokens. All Coin Validators are each finally marked with a different serial number, which is used to identify the Coin Validator.

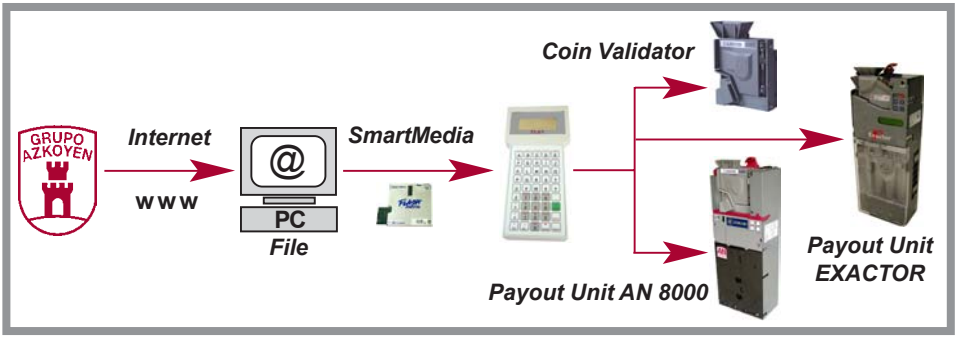
Once a selector is programmed, a series of its parameters that take part in accepting or rejecting a coin can be modified, for example in order to prevent frauds or in order to accept new coin mintings. This process consists of downloading to the Selector a data file called **ADJUSTMENTS**. There can be various adjustments to the same programming, and the downloaded adjustments can be cancelled, thereby restoring the original programming.

When the device accepts a coin, its interaction with the “exterior” can be modified. This group of adjustable parameters is called the **CONFIGURATION**, and it can be downloaded to the device.

The internal program executed on the device, and which makes it behave in a certain way, is called the **FIRMWARE**, and the device can also be updated through this tool.

The **TL21** included in the standard kit is configured for the **L66S, LS6, MODULAR X, LV5, ES525-UK, ES525-BDTA** (selectors for vending machines and gaming machines) families of selectors and for the **AN-8000 and EXACTOR** payout unit series. The **TL21** included in the Basic Kit is configured for the **L66S, LS6, LV5** and **X6** families of selectors. Through a personalised card located on the battery housing (see figure 6) and the corresponding connection cables, it can be configured to support other kinds of selectors. See section **«2.5. COMPLEMENTS AND ACCESSORIES»**, for more information.

The elements necessary for being able to correctly operate the **TL21** are structured as shown in the following schematic:



2. THE TL21 PROGRAMMER

2.1 PRESENTATION OF THE BASIC KIT

The basic kit being presented here, which is necessary for updating Coin Validators, is equipped with the following components.

Figure 1. *Basic Kit. Ref. 41105971-0*

1	Carrying bag.
2	Adapter card.
3	**TL21** Programmer.
4	RS232 cable.
5	16-way parallel cable.
6	Adapter for SmartMedia Memory and software.
7	8-Mb SmartMedia Memory Card.
8	Package of 4, LR6 batteries.
9	CD with applications for PC and Manuals.
10	5V power supply adapter.

2.2 GENERAL DESCRIPTION OF THE TL21

The **TL21** Programmer is a hand-held terminal that consists of the following:

1 LCD screen and a 45-key alphanumeric keyboard.

The LCD display format is 4 x 16 characters, grey-coloured.

The keyboard includes all of the keys that allow navigating among the various options that are offered by the **TL21** menu.

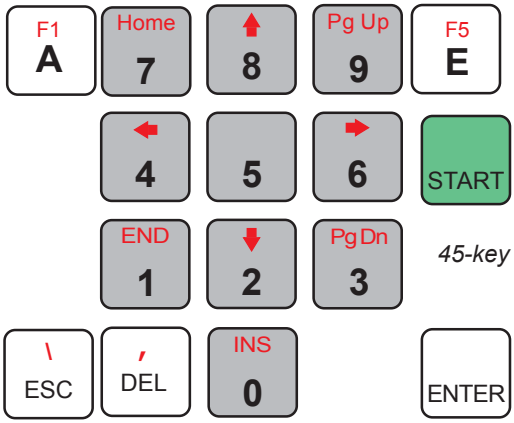


Figure 2. *Navigation keys*

Figure 3. *Programmer*

2 Connection ports for Coin Validators and for PC's (*At the top*).

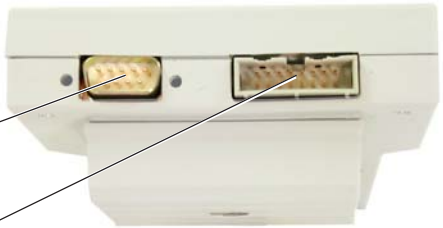


Figure 4. *Programmer (top part).*

3 Slot for the SmartMedia card (*On the right-hand side*).

Figure 5. *Input for SmartMedia*

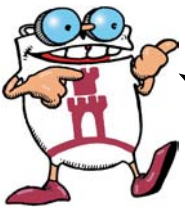
4 Housing for power cells or re-chargeable batteries, LR6 type *(At the back).*

5 Personalised card. This card is necessary in order to adapt the **TL21** to the various kinds of Coin Validators and Payout UnitsIt is snapped on next to the battery compartment.*(At the back).*

Figure 6. *Housing for power cells or re-chargeable batters, LR6 type, and cover.*

6 **5 V DC / 1.2 A** power supply input (*On the right-hand side*).

Figure 7. *Power supply input for external adapter.*



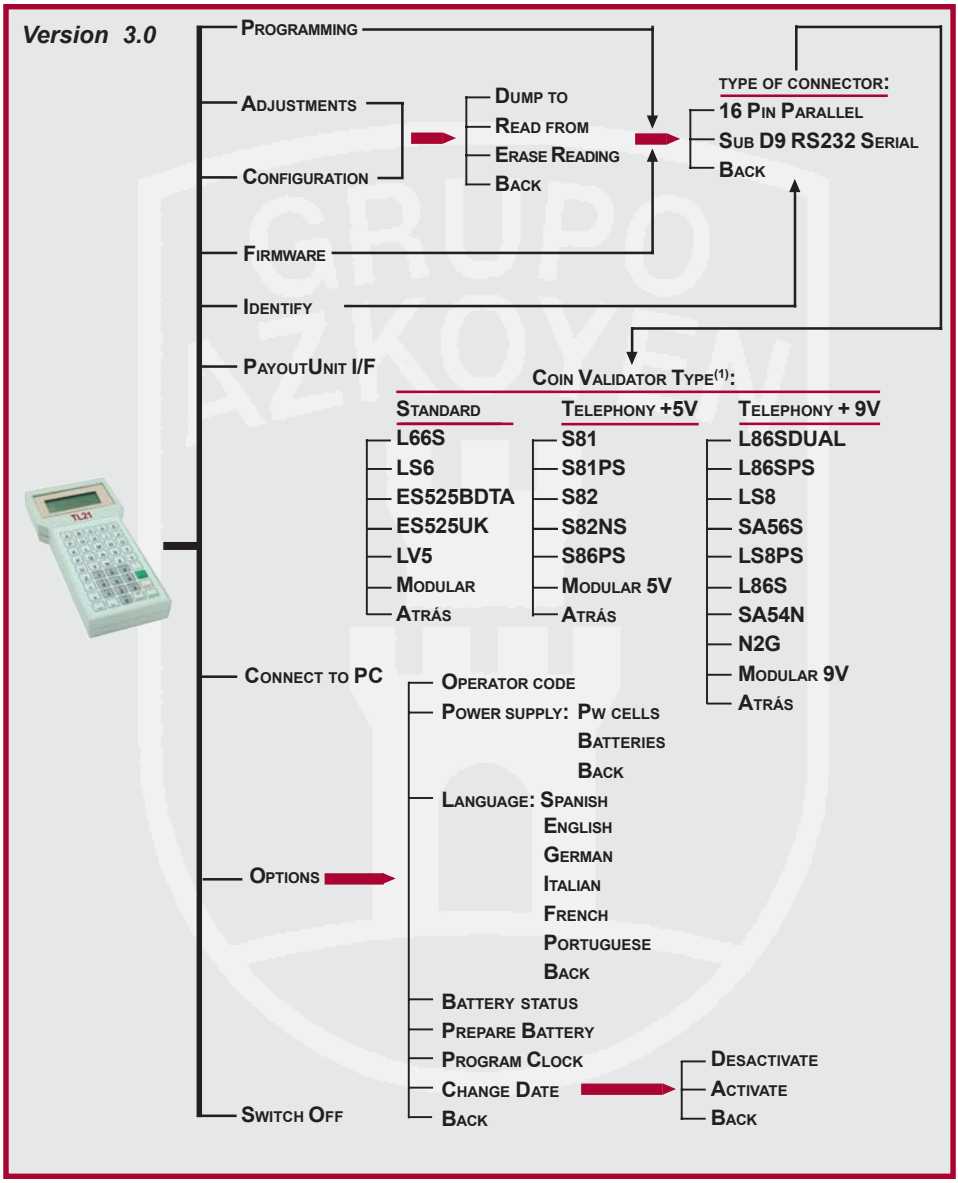
ATTENTION !!

ONLY THE POWER SUPPY ADAPTER PROVIDED BY AZKOYEN SHOULD BE CONNECTED.

THE USE OF ANY OTHER POWER SUPPLY ADAPTER MAY CAUSE SERIOUS DAMAGE TO THE PROGRAMMER.

2.3 FUNCTIONS OF THE TL21 PROGRAMMER

The **TL21** Programmer offers various possibilities and menus for working with its multiple options. The general schematic of the functions that the Programmer includes are presented below.



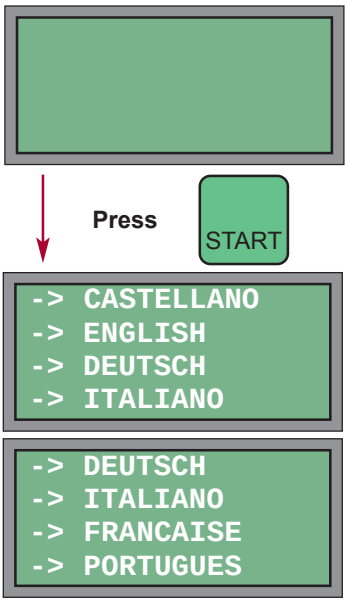
(1)The type and quantity of Coin Validators that appear in this menu depend on the adapter card (see figure 6) that is installed at the back of the **TL21**.

2.3.1 DESCRIPTION OF THE TL21 PROGRAMMER FUNCTIONS

The options of the **TL21** Programmer that allow the Coin Validators and Payout Units to be clearly and simply updated, thereby providing all of the information for the process, are displayed and activated by using the navigation keys.

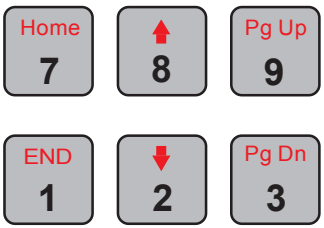
PRINCIPAL KEYS	
ENTER — Validates the option selected.	\ ESC — Returns to the previous screen (like the "Back" option).
8 / 2 — They select the various menu options.	4 / 6 — Display message with more than 16 characters.
Home 7 — Select the first menu option.	END 1 — Select the last menu option.
Pg Up 9 — Back to the previous screen.	Pg Dn 3 — Forward to the next screen.
F1 A / F5 E — The screen intensity can be adjusted at any time by using these two keys.	

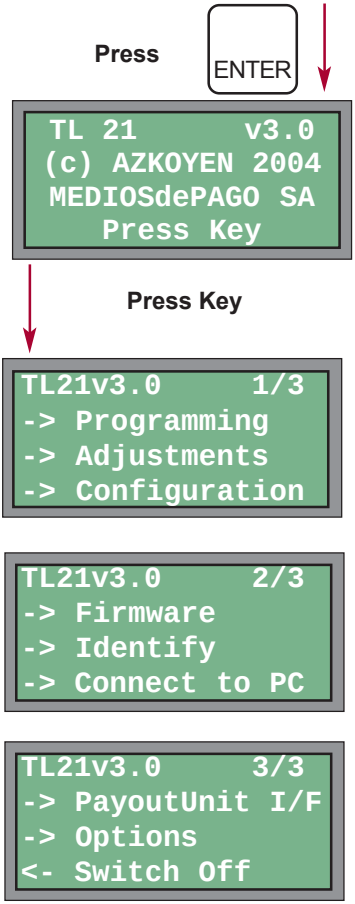
+ TURNING ON WITHOUT THE POWER ADAPTER



It is turned on by keeping the **START** button pressed until the initial screen appears.

The first time that the **TL21** is started, a menu appears in which the desired language must be selected from among those available:

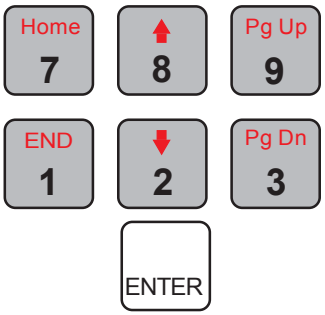




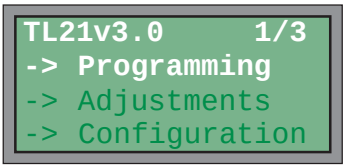
This screen blinks when displayed, and the main menu is accessed by pressing any key.

Those keys can be fit the intensity of the display:

The various possibilities are activated by using the navigation keys. The option that is blinking is chosen by pressing **ENTER**.



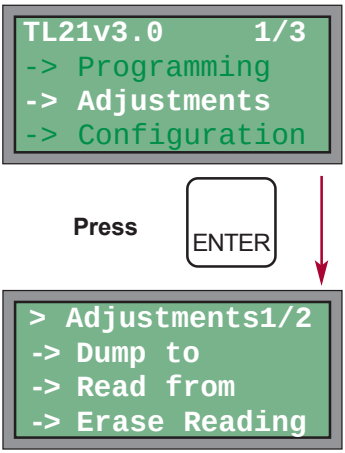
+ PROGRAMMING



This option allows programming the device using the desired Programming reference.

In order to perform the programming process of any device, see the **«2.4 OPERATING MODE»** section.

+ ADJUSTMENTS

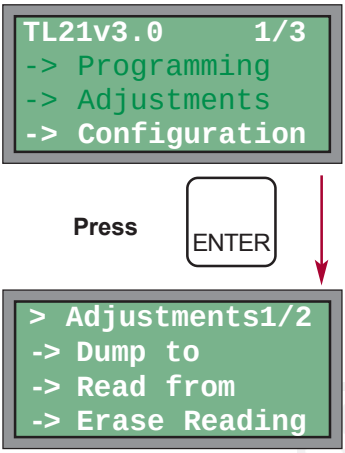


This option allows performing the following functions related to adjustments of the device:

- ✓ **Downloading** adjustment profiles to the devices. In order to download adjustments to any device, see the **«2.4 OPERATING MODE»** section.
- ✓ **Reading** the adjustment data of the device and storing the data in SmartMedia as a file.
- ✓ **Deleting** any of the files that have been created when reading the adjustments of a device.

order to go through the process of storing the adjustments of the device that have been read or to erase these readings from the SmartMedia memory, see the **«READING ADJUSTMENTS AND CONFIGURATIONS»** section.

+ CONFIGURATION

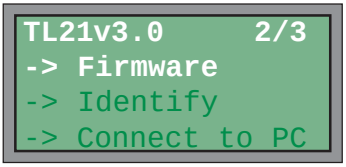


This option allows performing the following functions related to the configuration of the device.

- ✓ **Downloading** configuration files to the devices. In order to download configurations to any device, see the **«2.4 OPERATING MODE»** section.
- ✓ **Reading** the configuration data of the device and storing the data in SmartMedia as a file.
- ✓ **Deleting** any of the files that have been created when reading the configuration of a device.

In order to go through the process of storing the configurations of the device that have been read or to delete these readings from the SmartMedia memory, see the **«READING ADJUSTMENTS AND CONFIGURATIONS»** section.

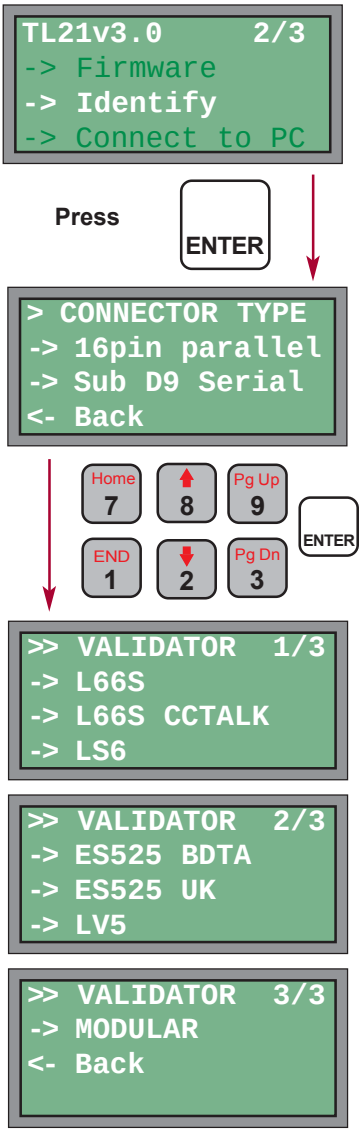
+ FIRMWARE



This option allows updating the Firmware of a Selector or Payout unit.

In order to update the Firmware of any Selector or Payout unit, see the **«2.4 OPERATING MODE»** section.

+ IDENTIFY MECHANISM



This option allows identifying the Coin Validator connected to the **TL21** without having to perform any kind of programming. The information remains stored in the programmer, and it can be extracted later using the **HeUs Software**.

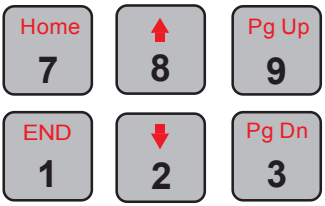
A screen is displayed, which shows the options that allow making the connection. The option that is blinking is the one that is activated.

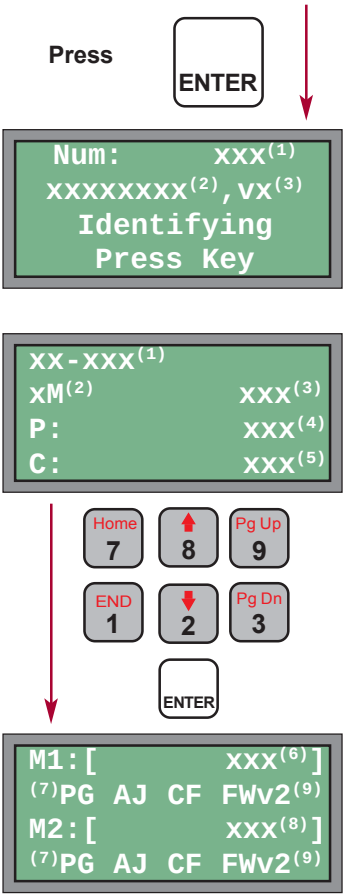
- ✓ **16-pin parallel:** This connector allows completely autonomous reprogramming of the Coin Validators, whereby the **TL21** supplies the power necessary to the Coin Validator through its internal power cells or batteries.
- ✓ **SUB-D9 serial:** This connector allows configuring the **AN 8000** and **EXACTOR** series Payout units. In this case, the power for the Coin Validator and the Payout unit must be supplied by the machine to which they are connected.
- ✓ **Back:** It returns to the previous menu.

By pressing **ENTER** while holding down the Back option, or **ESC**, it returns to the main menu.

After having selected the kind of connector, select the kind of device to be identified.

Activate the various possibilities by using the navigation keys. Press **ENTER** to select the flashing option.





Once the kind of device has been selected, its identifying data are displayed.

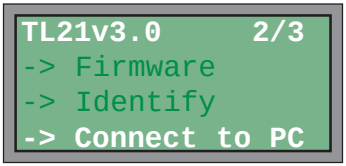
For non-modular devices, the following is displayed:

1. Serial number.
2. Reference.
3. Reference version.

For modular devices, the following is displayed:

1. Type of Selector.
2. Number of modules that comprise the device.
3. Serial number.
4. Reference – version of the device.
5. Configuration of the device.
6. Name of module 1.
7. Functions supported by the module:
   PG: Program. **AJ:** Adjust.
   CF: Configure. **FW:** Install Firmware.
8. Name of module 2.
9. Firmware version of the module.

+ CONNECT TO PC



Press ENTER

This option allows connecting the **TL21** to a PC using an RS232 serial cable supplied for such purpose.

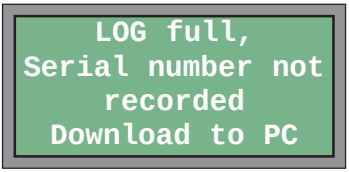
The **TL21** records all of the programming and identification operations that it performs. In order to access these data, it is necessary to use the **HeUs Software**.

Press ESC

By pressing **ENTER,** the **TL21** goes idle and shows the informational message.

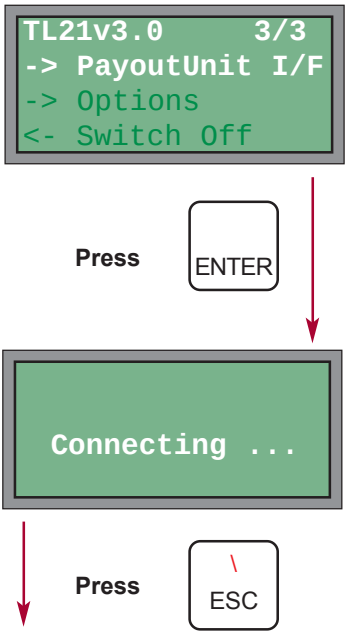
Return to the main menu by pressing any key.

The **TL21** memorises up to 2000 operations. When there are 50 operations left until the memory is full, a message is displayed.



If the memory is full, a warning message is displayed, and it does not store any more operations until the data are downloaded to a PC and the memory is erased. See **HeUs Software** manual.

+ EXACTOR PAYOUT UNIT INTERFACE

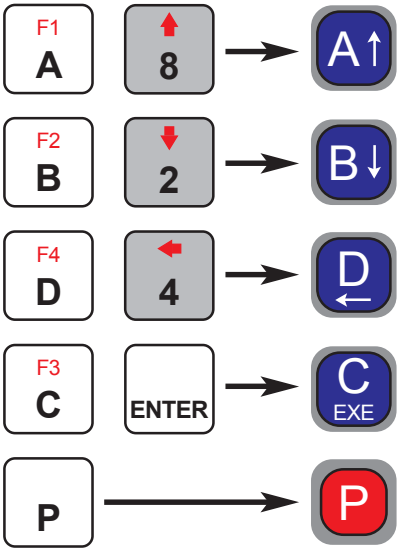


This option allows operating the **TL21** as the keypad and screen of an **EXACTOR** Payout unit. See the «**CONNECTION TO EXACTOR PAYOUT UNIT**» section.

By pressing **ENTER**, the **TL21** will establish communications with the connected device. During the connection process, it will show a message informing of the operation.

When the connection is successfully made, the **TL21** will show the kind of device connected. If it is a payout unit, it will show the data on screen and will accept orders on its keypad for the payout unit.

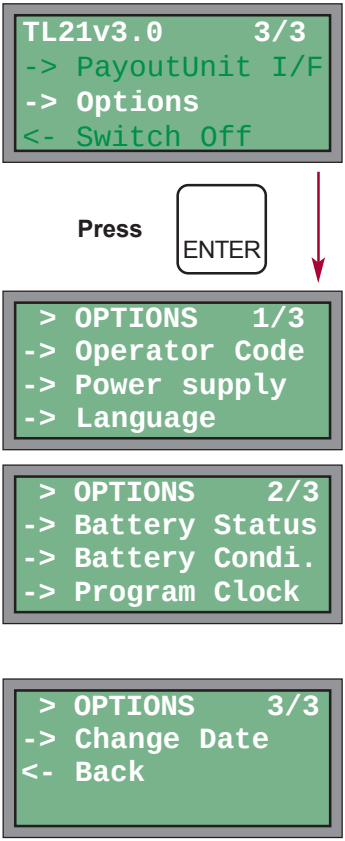
The key correspondence with the payout unit is the following:



For more information, consult the **EXACTOR** Payout Unit manual.

In order to exit the Payout Unit interface function, press **ESC**.

+ OPTIONS



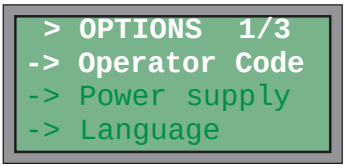
This function allows accessing the various configuration options of the **TL21**.

It shows the next menu:

- ✓ **Operator code:** It confirms or changes the Operator Code in order to operate with **AN 8000** Payout units.
- ✓ **Power supply:** It selects the kind of power supply.
- ✓ **Language:** It selects the language of the **TL21** menus.
- ✓ **Battery status:** It shows the available battery charge.
- ✓ **Prep. Batteries:** It prepares batteries in order to recharge them.
- ✓ **Program Clock:**Programs the date/time.
- ✓**Change Date:**Allows the date/time to be changed.
- ✓ **Back:** It returns to the main menu.

By pressing **ENTER** while holding down the Back option, or **ESC**, it returns to the main menu.

OPERATOR CODE



Press ENTER

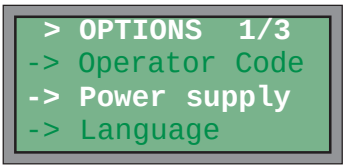
Introduce code and press ENTER

This option allows programming an Operator Code in the **TL21** that will subsequently serve as an identifier for communications with the **AN 8000** Payout Unit. This code must coincide with the one entered into the **AN 8000** using function **F475** in the programming menu of the same.

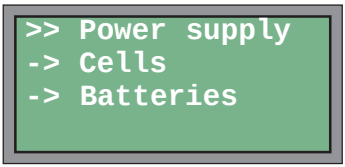
In order to program the code in the **TL21**, just enter 4 digits and press **ENTER**. If a wrong number is entered, press **DEL** to erase what was entered, and then start again.

If the **TL21** is being used to reprogram an **AN 8000**, and the code does not coincide, a failed communication message automatically appears and it returns to the start menu.

POWER SUPPLY



Press ENTER

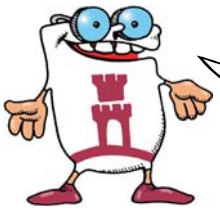


This option allows selecting the kind of power supply for the **TL21**.

The following menu is displayed:

- ✓ **Power cells:** This option is selected when the **TL21** is powered by STANDARD LR6 power cells.
- ✓ **Batteries:** This option is selected when LR6 RECHARGABLE batteries are used.

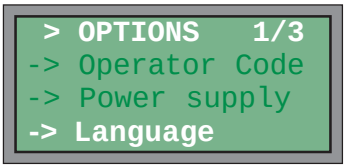
  It thus allows the 5V power supply adapter to recharge the batteries when necessary.



ATTENTION!

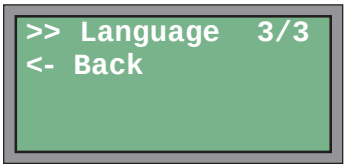
DO NOT CONFIGURE THE EQUIPMENT IN THE "BATTERIES" MODE IF POWER CELLS ARE INSTALLED, SINCE THE TL21 COULD ENTER THE RECHARGE MODE, THEREBY CAUSING THE POWER CELLS TO HEAT UP AND EXPLODE.

LANGUAGE

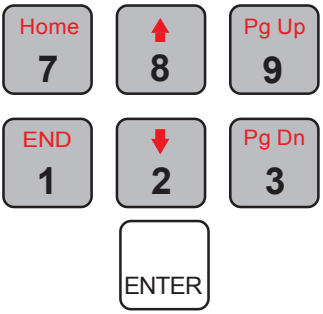


Press ENTER

This option allows selecting the language that is used to display the **TL21** menus.

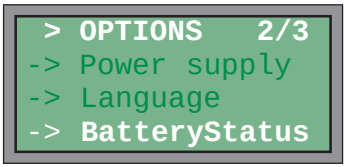


The various possibilities are activated using the navigation keys. By pressing ENTER, the language of the TL21 menu is selected.



Press **ESC** to return to the main menu.

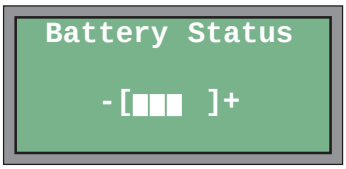
BATTERY STATUS



Press ENTER

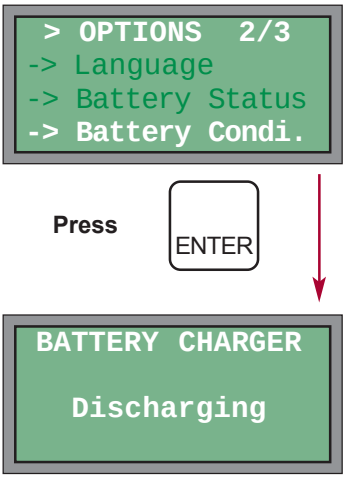
This option shows the power level of the rechargeable **TL21** batteries.

This function is only operational if the *«Power supply – Batteries»* option has been previously selected.



By pressing **ENTER**, it displays the battery status.

PREPARE BATTERY



This option allows preparing the rechargeable batteries for a full charge. When this option is selected, the batteries are discharged completely, and they are then recharged.

After the battery is conditioned (discharged and recharged), the power adapter must be disconnected for half an hour, and then it can be subsequently connected again.

It is only operational if the *«Power supply – Batteries»* option has been previously selected and the 5V power supply adapter is connected to the **TL21**.

It is recommendable to perform this operation once a month in order to extend the life of the rechargeable batteries.

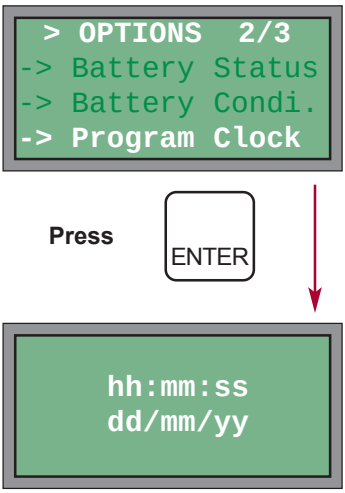
By pressing **ENTER**, it proceeds to prepare the batteries.

Press **START** to cancel the process and turn off the **TL21**.

✓ The **TL21's** with the «-0» and «-1» references are turned off by disconnecting them from the power adapter.

See the section, «**ERRORS WHEN CHARGING AND DISCHARGING THE BATTERIES.**»

PROGRAM CLOCK

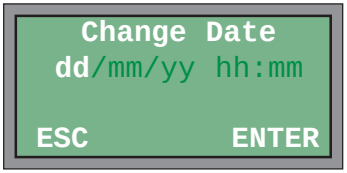


This option allows the time and date to programmed on the **TL21**.

For the **TL21's** with the «-0» and «-1» reference, these values are permanently set, given that they do not have a clock.

Press any key to modify the date and time.

Press any key

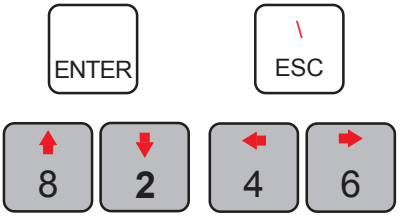


Use the right and left arrow keys to select the fields to be modified.

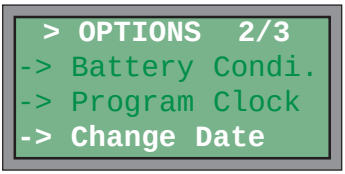
Use the up and down arrow keys to increase or decrease the value.

✓Press **ENTER** to save the changes.

✓ Press **ESC** to leave the menu without saving the changes



CHANGE DATE



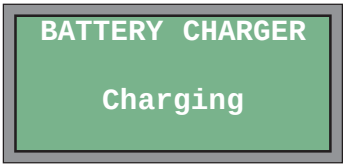
This function is only operational in the **TL21's** with the «-0» and «-1» references.

It allows the date and time change to be enabled in the first Identify or Program option after being turned on.

Press ENTER

The desired option is selected by using the navigation keys and pressing **ENTER**.

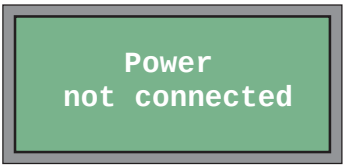
+ TURNING ON WITH THE POWER ADAPTER



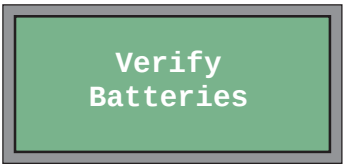
In order to charge the batteries, connect the external power adapter while the **TL21** is turned off. The **TL21** must be configured as follows: Options ➔Power supply ➔ Batteries.

ERRORS WHEN CHARGING AND DISCHARGING BATTERIES

Errors may occur when the batteries are charged or discharged, which errors are shown below.

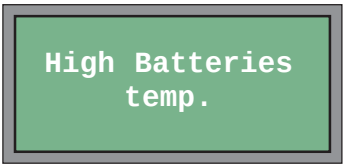


When the option to condition the batteries is entered, the power adapter is not connected to the **TL21**.



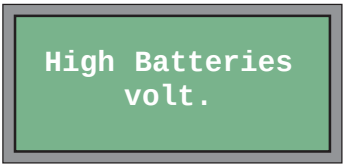
This message advises that one of the two batteries is not installed or that the batteries are reversed.

Check batteries.



The temperature of the batteries is too high for charging and discharging.

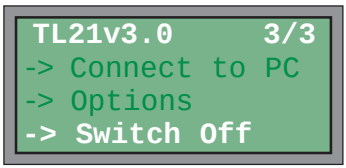
Disconnect the TL21 for 30 minutes.



The voltage of the batteries is too high for charging and discharging.

Disconnect the TL21 for 30 minutes.

+ TURN OFF THE TL21



This operation turns off the **TL21**. In any event, the programmer disconnects itself after 3 minutes if no operation has been performed and it is being powered by power cells or batteries.

The **TL21** Programmer is turned off by pressing **ENTER.**

The **TL21** can also be turned off by pressing the **START** key.

✓The **TL21's** with the «-0» and «-1» references are turned off by disconnecting them from the power adapter.

2.4 OPERATING MODE

2.4.1 OBTAINING DATA

Before being able to operate with the **TL21** Programmer, all of the elements must be configured with the software necessary so that they all work together correctly and in order to obtain the data for the update.

PRIOR REQUISITES

1 The SmartMedia memory module must be formatted. This operation is performed once the SmartMedia controllers have been installed in the equipment. For this simple process, just choose the appropriate controller for your operating system (W95, W98, WM, NT4, W2000) from the CD-ROM or the floppy disk supplied with the adapter.

In order to copy files from a PC to the SmartMedia card, insert the card adapter into the 3-1/2" floppy disk drive of the computer.

2 Have an internet connection available with authorised access to the

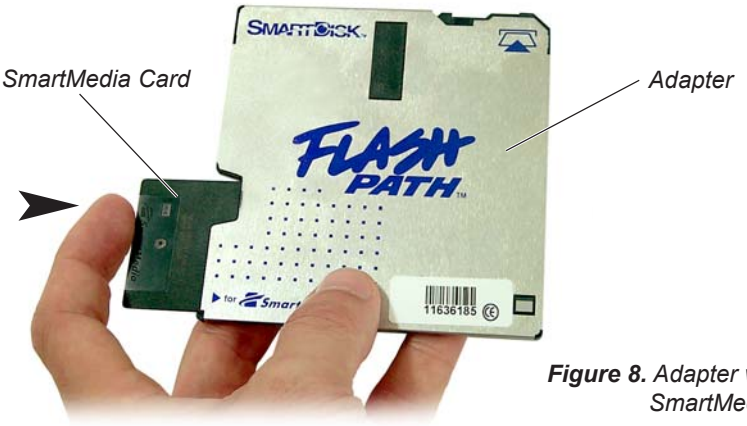


Figure 8. *Adapter with the SmartMedia Card.*

AZKOYEN Medios de Pago S. A. web page and have an e-mail account in order to receive the programming. See point **"3. OBTAINING FILES VIA INTERNET."**

3 Have the **HeUs Software** installed in your PC or computer equipment. See the instructions on **HeUs Software** manual.

THE PROCESS OF OBTAINING DATA

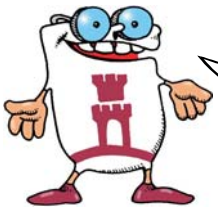
After having completed the requisites in the preceding point, the basic process for obtaining data is the following:

1. The desired programs are obtained by using the **Azkoyen Medios de Pago S. A.** web page and an e-mail address. To do so, it is necessary to be authorised as a user.
2. The **HeUs Software** is then used to copy the new programs to the SmartMedia memory card while its corresponding adapter is connected to the PC.
3. The SmartMedia card is then inserted into the **TL21**.

In order to obtain a complete description of this process, follow the instructions in point **"3. OBTAINING FILES VIA INTERNET"** and **HeUs Software** manual.

Figure 9. *SmartMedia card in the* ***TL21****.*

2.4.2 COIN VALIDATOR AND PAYOUT UNIT EXACTOR REPROGRAMMING



REPROGRAMMING THE COIN VALIDATOR DOES NOT ALWAYS MEAN COMPLETE ADAPTATION OF THE MACHINE.

IT IS POSSIBLE THAT IF THE TYPE OF MONETARY CHANGE OR ACCEPTED COINS HAVE BEEN CHANGED, THEN OTHER COMPONENTS SUCH AS THE RETURNER TUBES, HOPPERS, ETC., MAY ALSO NEED TO BE CHANGED.

CONNECTION TO THE COIN VALIDATOR

The **TL21** communicates directly with the Coin Validator by using the 16-way parallel cable, thereby supplying the Coin Validator with power and identifying the data of the same.

While using a connector similar to the one in the diagram, the connection must be made with the «feet» down for the **L66S**, **LS6**, **LS8**, **LV5**, **S81**, **L86S** and **ES525BDTA** Coin Validators, and with the «feet» up of for the **ES525 UK** Coin Validators.

For all other kinds of Coin Validators, ensure that the connector tabs are aligned.

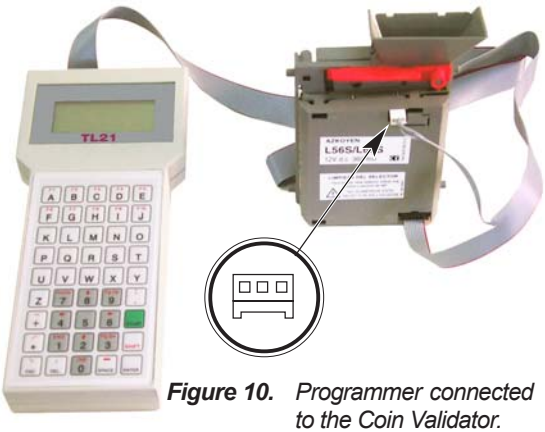


Figure 10. *Programmer connected to the Coin Validator.*

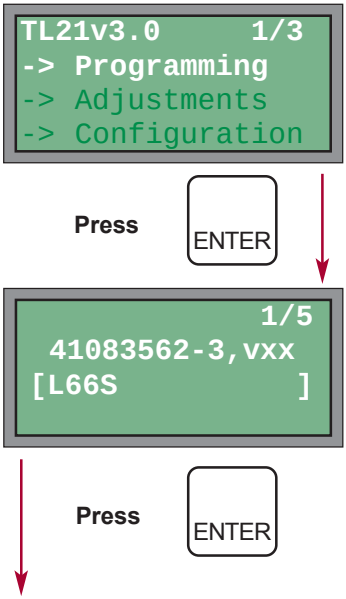
CONNECTION TO THE EXACTOR PAYOUT UNIT

The **TL21** is connected to the **EXACTOR** Payout Unit as shown in **figure 10b** using the **EXACTOR** Data Transmission Cable (Sub D9 Serial, not supplied).

This cable is only for establishing communications with the Payout Unit and the associated Selector. The power supply of them both must be provided through the machine to which they are connected.

Figure 10b. *Programmer connected to the EXACTOR Payout Unit.*

+ PROGRAMMING (REFERENCE NUMBER)



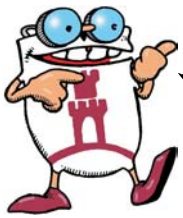
This option allows selecting the programming to be introduced into the Coin Validator or Pay-out Unit, thus giving them a new reference number.

A screen is displayed, which gives information on the content of the SmartMedia card, thereby indicating the following:

- ✓ The reference numbers that the SmartMedia card contains.
- ✓ The reference number of the new programming.
- ✓ The kind of Coin Validator.
- ✓ Informational comment.

By pressing **ENTER**, it selects the reference shown on screen and continues. See «**REPROGRAMMING PROCESS**».

By pressing **ESC**, it returns to the main menu.

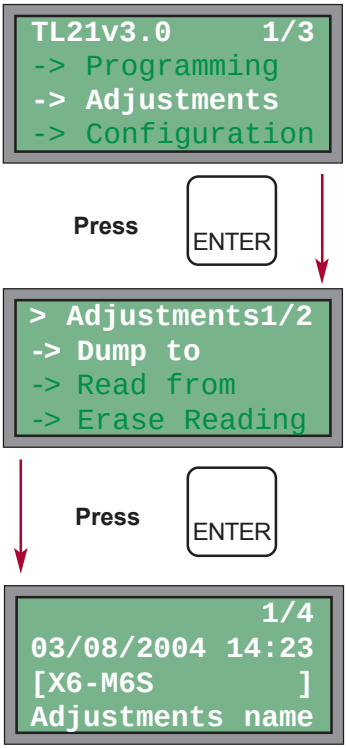


IT SUPPORTS THE FOLLOWING SMARTMEDIA FORMATS:

✓ V1. WITHOUTH THE REFERENCE VERSION.
✓ V2. WITH THE REFERENCE VERSION.

(SEE THE HEUS SOFTWARE MANUAL).
THE CAPACITY OF SMARTMEDIA IS LIMITED TO 32 REFERENCES AND 254 FILES.

+ ADJUSTMENTS



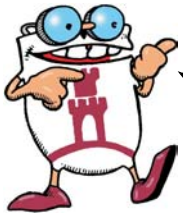
This option allows selecting the adjustments to be downloaded to the Selector or Payout Unit.

A screen is displayed, which provides information on the content of the SmartMedia memory, thereby indicating the following:

- ✓ Number of adjustments that the SmartMedia memory contains.
- ✓ Date when the adjustment file was created.
- ✓ The kind of Selector.
- ✓ Name that identifies the adjustments.

By pressing **ENTER**, it selects the file that is shown on screen and continues. See «**REPROGRAMMING PROCESS**».

Press **ESC** to return to the main menu.

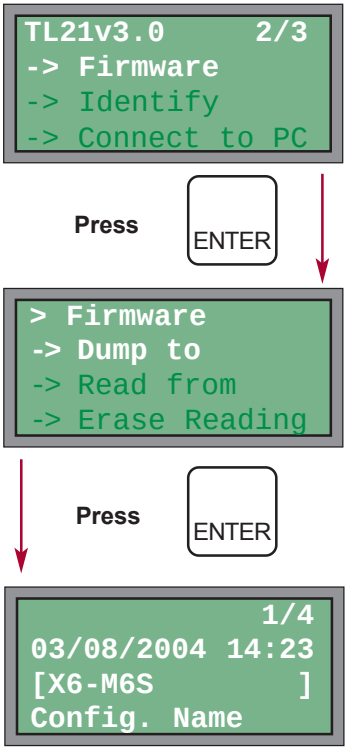


ADJUSTMENT DOWNLOADING CAN ONLY BE PERFORMED ON MODULAR DEVICES.

THE CAPACITY OF SMARTMEDIA IS LIMITED TO 32 ADJUSTMENTS (254 FILES).

(SEE THE HeUs SOFTWARE MANUAL).

+ CONFIGURATION



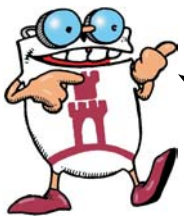
This option allows selecting the configuration to be downloaded to the Selector or Payout unit.

A screen is displayed, which provides information on the content of the SmartMedia memory, thereby indicating the following:

- ✓ Number of configurations that the Smart Media memory contains.
- ✓ Date when the configuration file was created.
- ✓ The kind of Selector.
- ✓ Name that identifies the configuration.

By pressing **ENTER**, it selects the file that is shown on screen and continues. See **«REPROGRAMMING PROCESS»**.

Press **ESC** to return to the main menu.

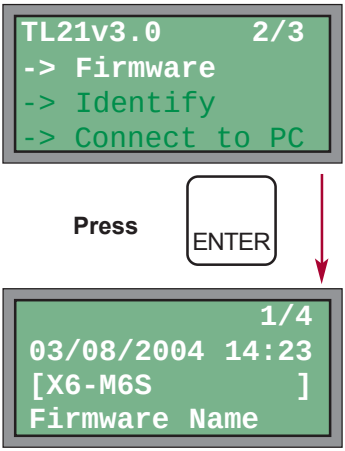


CONFIGURATION DOWNLOADING CAN ONLY BE PERFORMED ON MODULAR DEVICES.

THE CAPACITY OF SMARTMEDIA IS LIMITED TO 32 CONFIGURATIONS (254 FILES).

(SEE THE HeUs SOFTWARE MANUAL).

+ DOWNLOAD FIRMWARE



This option allows selecting the Firmware to be downloaded to the Selector or Payout unit.

A screen is displayed, which provides information on the content of the SmartMedia memory, thereby indicating the following:

- ✓ Number of Firmwares that the SmartMedia memory contains.
- ✓ Date when the Firmware was created.
- ✓ The kind of Selector.
- ✓ Name that identifies the Firmware.

By pressing **ENTER**, it selects the file that is shown on screen and continues. See **«REPROGRAMMING PROCESS»**.

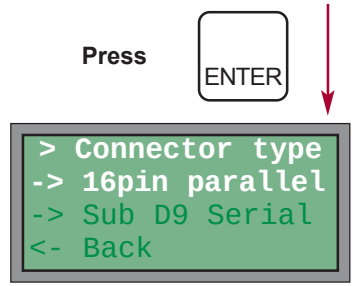
Press **ESC** to return to the main menu.

FIRMWARE DOWNLOADING CAN ONLY BE PERFORMED ON MODULAR DEVICES.

THE CAPACITY OF SMARTMEDIA IS LIMITED TO 32 FIRMWARES (254 FILES).

(SEE THE HeUs SOFTWARE MANUAL).

REPROGRAMMING PROCESS

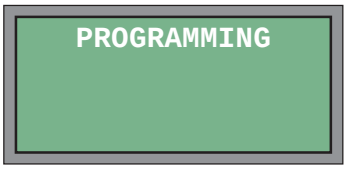


1 We have previously selected the task to perform:

- ✓ **PROGRAM.**
- ✓ **ADJUST.**
- ✓ **CONFIGURE.**
- ✓ **FIRMWARE.**

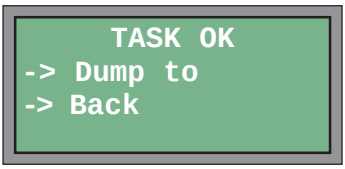
and the data to download to the device.

2 Choose the **«16PIN PARALLEL»** connector whereby communications is established with the Selector, or the **«SUB D9 SERIAL»** connector whereby communications is established with modules that comprise the **EXACTOR** Payout Unit.



3 When **ENTER** is pressed, the **TL21** proceeds to program the Coin Validator.

During this process, it is possible to use more than one SmartMedia module.

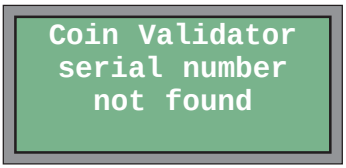


When the reprogramming is complete, the display shows a message that indicates the result of the process.

- ✓ Another Coin Validator can subsequently be programmed by pressing **ENTER**.
- ✓ By pressing **ESC,** it returns to the main menu.

If the **TL21** is not able to establish communications with the Coin Validator, the following screen is displayed:

- ✓ Check the Coin Validator connections and the battery level.

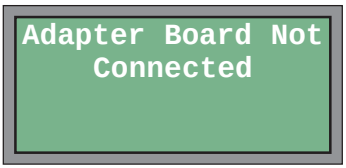


In the event that the serial number of the Coin Validator does not exist for the selected reference, the attached message is displayed.

✓ Various SmartMedias can be entered until the programming of the selected reference with the serial number of the connected Coin Validator is found.

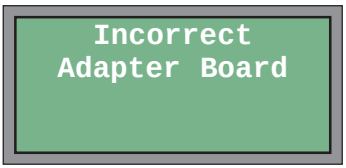
If communication is interrupted during the process, the attached message appears.

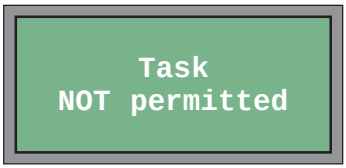
✓ Check the Coin Validator connections and the battery level.



Check the connection to the **TL21** from the Personaliser Card. See figure 6.

The selected Coin Validator cannot be programmed using the Personaliser Card that is connected.





The data selected for downloading to the device are **not compatible** with the same.

✓ Check the specifications of the device and re-request the corresponding programming.

The device is not operational.

✓ Download the Firmware that is appropriate for this tool and or that is appropriate for the tools indicated for such purpose.

The device is deprogrammed.

✓ Program the device using the desired reference.

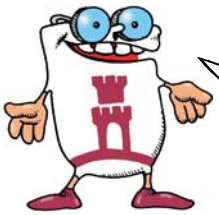
An error occurred when saving the data read in the SmartMedia memory.

✓ Try to read again.

The available space for storing readings in the SmartMedia memory is full.

✓ Download the stored readings to a PC and free up space in the memory.

2.4.3 REPROGRAMMING AN-8000 PAYOUT UNITS



REPROGRAMMING THE PAYOUT UNIT DOES NOT ALWAYS MEAN THE COMPLETE ADAPATION OF THE MACHINE.

IT IS POSSIBLE THAT IF THE TYPE OF MONETARY CHANGE OR ACCEPTED COINS HAVE BEEN CHANGED, THEN THE RETURNER TUBE SYSTEM MAY ALSO NEED TO BE ADAPTED.

The **TL21** Programmer allows performing two completely different operations when it operates with the **AN 8000** Payout Units:

1 Reprogram the payout unit. By selecting the appropriate reference, the following aspects can be reprogrammed: type of classification, accepted coins, etc.

2 **Reprogramming the associated Coin Validator** without having to remove it from the Payout Unit.

CONNECTION TO THE PAYOUT UNIT

The **TL21** is connected to the **AN 8000** Payout Unit by using the **AN 8000** connection cable bundle (Sub D9 Serial connector not supplied) as shown in **figure 12**.

This cable is only used for establishing communications with the Payout Unit and its associated Coin Validator. The power supply of both must be provided by the machine in which they are installed.

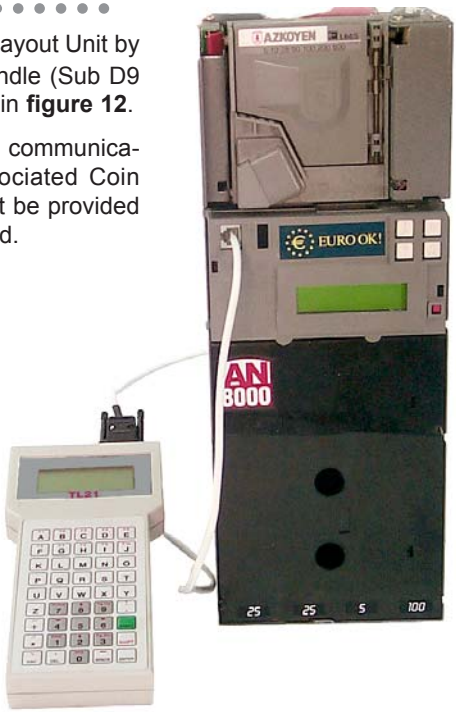
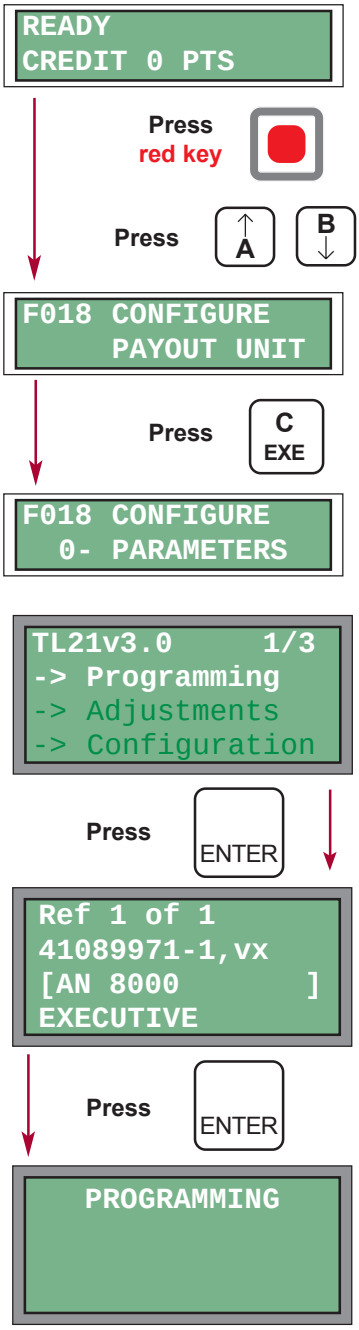


Figure 12. *Programmer connected to the Payout Unit.*

PROCESS OF REPROGRAMMING THE PAYOUT UNIT



1 The function **F018** of the Payout Unit must be activated in order to be able to establish communications with the **TL21**.

In order to do so, access the programming menu of the Payout Unit by pressing the **"red key"** and use the keys **"A"** or **"B"** in order to search for the function **F018**. Be pressing **"C/EXE"**, a new menu is accessed, which displays three options:

0. Used to configure the **Parameters.**

1. Used to configure **Flash.**

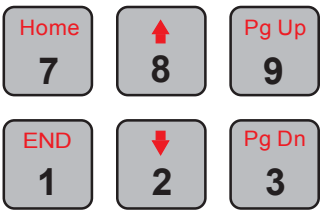
2. Used to configure the **Coin Validator**.

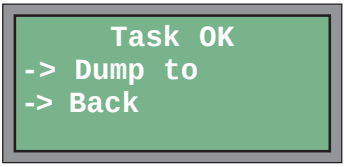
Keys **A** and **B** are used to change the kind of configuring to be performed between "0. Parameters," "1. Flash," and "2. Coin Validator." In this case, it is not necessary to change it, and **C/EXE** should be pressed in order to select programming the parameters of the **AN-8000**

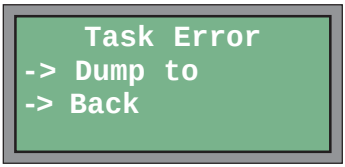
In order to carry out communications, it is necessary that the Operator Code entered into the **TL21 also be the same** as the one programmed in the Payout Unit.

2 Once the Payout Unit has been prepared, choose the **"Select Programming"** option from the start screen of the **TL21** and press **ENTER**.

3 Select the file that contains the data to be programmed. To do so, find the desired reference by using keys **«7» «8»** and **«9»** or **«1» «2»** and **«3»** and then press **ENTER**.







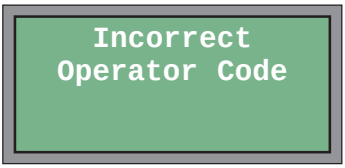
When the reprogramming finalises, the display shows a message thereby indicating that the process was completed successfully.

- ✓ By pressing **ENTER**, another Payout Unit can be programmed.
- ✓ By pressing **ESC**, it returns to the main screen.

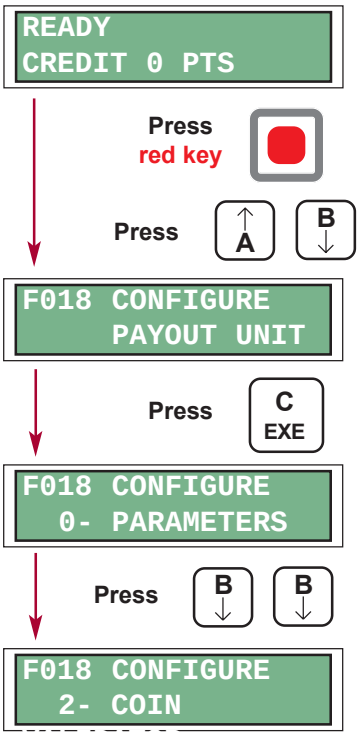
If the **TL21** cannot establish communications with the Payout Unit, the following screen is displayed:

If the operator code configured in the **TL21** does not coincide with the one in the **AN 8000,** then the **AN 8000** rejects the connection and communication is aborted. In this case, the **AN 8000** programming is not changed.

If the operator code does not coincide, the following message will appear.



THE PROCESS OF REPROGRAMMING THE ASSOCIATED COIN VALIDATOR



1 The function **F018** of the Payout Unit must be activated in order to be able to establish communications with the **TL21**.

In order to do so, access the programming menu of the Payout Unit by pressing the **"red key"** and use the keys **"A"** or **"B"** in order to search for the function **F018**. Be pressing **"C/EXE"**, a new menu is accessed, which displays three options:

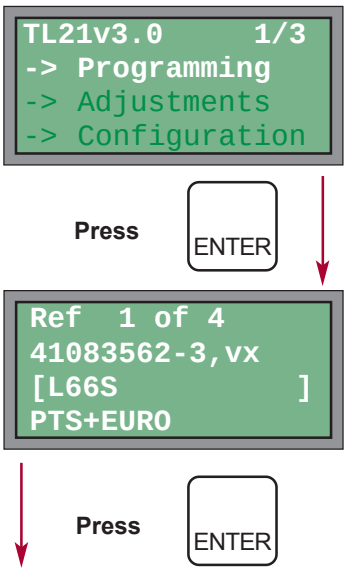
0. Used to configure the **Parameters.**

1. Used to configure **Flash.**

2. Used to configure the **Coin Validator**.

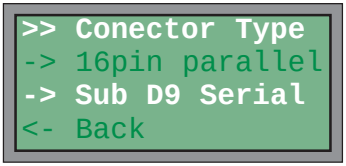
Keys **A** and **B** are used to change the kind of configuration between "0. Parameters," "1. Flash," and "2. Coin Validator." In this case, press key B two times, and then press **C/EXE** for Coin Validator programming.

In order to carry out communications, it is necessary that the Operator Code entered into the **TL21 also be the same** as the one programmed in the Payout Unit.



2 Once the Payout Unit is prepared, choose the **"PROGRAMMING"** option from the start screen of the **TL21** and press **ENTER**.

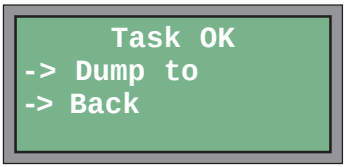
3 Select the reference that contains the data to be reprogrammed. To do so, find the desired reference by using keys **«7» «8»** and **«9»** or **«1» «2»** and **«3»** and then press **ENTER**.



4 Chose the **"Sub D9 Serial"** type of connector with which communications will be established with the Coin Validator associated to the Pay-out Unit.

Press ENTER

5 When **ENTER** is pressed, the **TL21** proceeds to program the Coin Validator.



When the reprogramming ends, the display shows a message that indicates the result of the process.

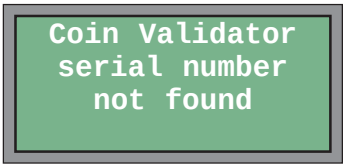
✓ By pressing **ENTER**, another Coin Validator can be programmed.

✓ By pressing **ESC**, it returns to the main screen.

If the **TL21** cannot establish communications with the Coin Validator, the following screen is displayed:

In the event that the serial number of the Coin Validator does not exist for the selected reference, the attached message is shown.

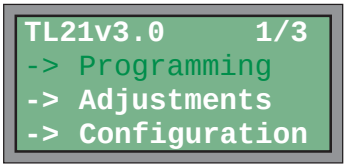
✓ Various SmartMedias can be entered until the programming of the selected reference with the serial number of the connected Coin Validator is found.



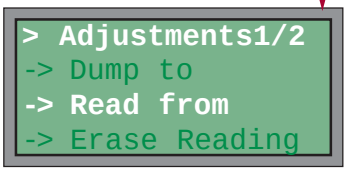
If communication is interrupted during the process, the attached message appears.

✓ Check the Coin Validator connections and the battery level.

2.4.4 READING OF ADJUSTMENTS AND CONFIGURATIONS



Press ENTER



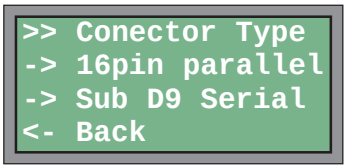
It is possible to read the Adjustments or Configurations that the device has, and they can be stored in the SmartMedia memory as an Adjustment or Configuration file.

The screen is displayed with the options allowed in order to make the connection. The flashing option is the one that is activated.

- ✓ **16PIN PARALLEL.**
- ✓ **SUB-D9 SERIAL.**
- ✓ **BACK:** Returns to the previous menu.

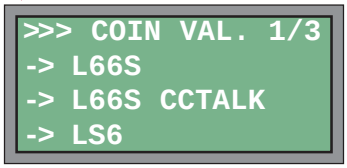
It returns to the main menu by pressing **ENTER** when the Back option is activated, or by pressing **ESC**.

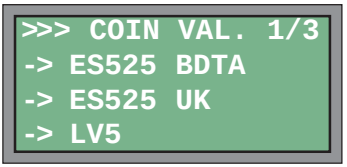
Press ENTER



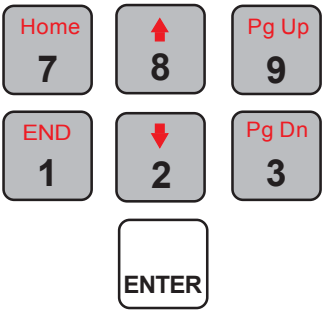
After selecting the type of connector, the kind of device to be read must be selected. See the **«IDENTIFY DEVICE»** section.

Press ENTER





It returns to the main menu by pressing **ENTER** when the Back option is activated, or by pressing **ESC**.



Once the kind of device has been selected, it asks for the identification to be entered whereby the data read in the SmartMedia memory are going to be stored.

```
default ID:
xxxxxxxxxxxx
Change?
```

By default, it provides the ID that it has read from the device . By pressing **ESC**, this ID would be stored. A new ID can be entered by pressing the necessary keys and then pressing **ENTER**.

```
        TASK OK

     Possible
      Readings:XX
```

When the reading has been stored correctly in the SmartMedia memory, it displays the readings of the Configurations or Adjustments that can still be stored in the **TL21**. When there is no space left, they must be downloaded to a PC to free up space. See the **HeUs Software** manual.

```
> Adjustments1/2
-> Dump to
-> Read from
-> Erase Reading
```

It also allows deleting readings that are no longer of interest.

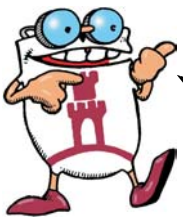
```
1/4
03/08/04 14:23
[X6-m6s]
Adjustments name
```

Press **ENTER** to select the file that is displayed on screen.

```
        TASK OK

     Possible
      Readings:XX
```

When the selected file has been deleted from the SmartMedia memory, it displays the readings of the Configurations or Adjustments that can still be stored in the **TL21.**



ADJUSTMENTS AND CONFIGURATIONS CAN ONLY BE READ ON MODULAR DEVICES.

THE CAPACITY OF SMARTMEDIA IS LIMITED TO 32 ADJUSTMENTS (254 FILES).

(SEE THE HeUs SOFTWARE MANUAL).

2.5 COMPLEMENTS AND ACCESSORIES

In addition to all of the components mentioned up to now, there are a series of accessories and compliments available that are all adapted to the **TL21** Field Programmer in order to work correctly with it.

These elements are listed below:

ES525 BDTA TL21 CABLE KIT

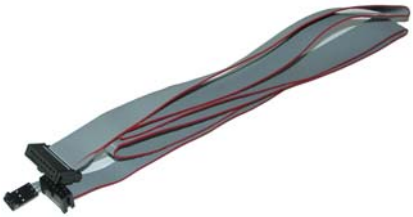
Coin Validator connection cable ES525 INDOR/KOMBI

TL21 PAYOUT UNIT CABLE

AN 8000 / EXACTOR data transmission cable

TL21 STANDARD INVERTED POWER SUPPLY CABLE KIT

Standard inverted power supply connection cable.

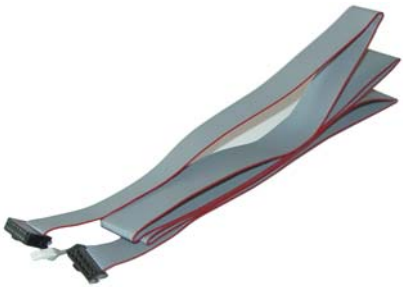


9-V PS TL21 TELEPHONY CABLE KIT

L86PS Coin Validator connection cable

9-V DUAL TL21 TELEPHONY CABLE KIT

Dual L86 Coin Validator connection cable



9-V SA56 TL21 TELEPHONY CABLE KIT

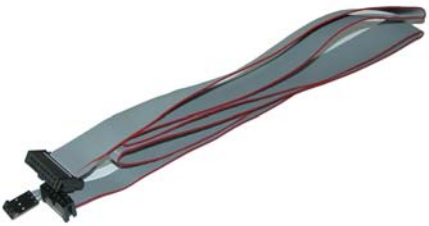
SA56 Coin Validator connection cable

ES525 UK TL21 CABLE KIT

ES525 UK Coin Validator connection cable

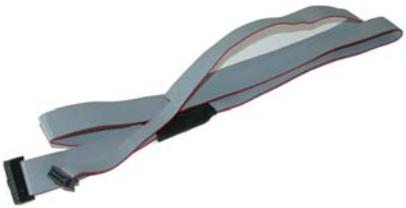
STANDARD TL21 CABLE KIT

Standard connection cable



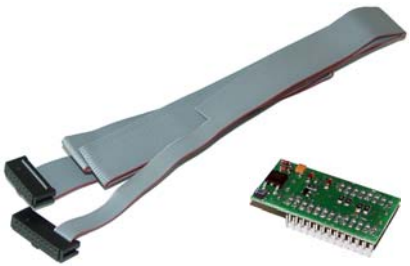
5-V S81PS TL21 TELEPHONY CABLE KIT

S81PS Coin Validator connection cable



9-V SA56 TL21 TELEPHONY KIT

SA56 Coin Validator connection cable
9-V telephony adapter card



9-V DUAL TL21 TELEPHONY KIT

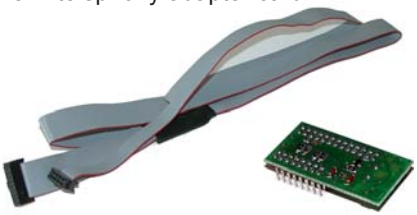
L86 Dual Coin Validator connection cable
9-V telephony adapter card

9-V PS TL21 TELEPHONY KIT

L86PS Coin Validator connection cable
9-V telephony adapter card

5-V S81PS TL21 TELEPHONY KIT

S81PS Coin Validator connection cable
5-V telephony adapter card



A6 TOTALIZADOR CABLE KIT

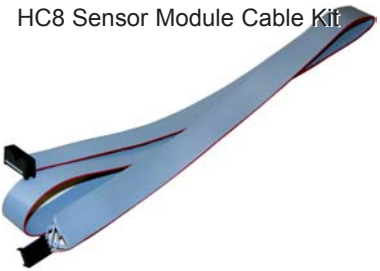
A6 Totalizador Cable Kit

L66 CCTALK 1 WIRE CABLE KIT

L66 CCTALK 1 Wire Cable Kit

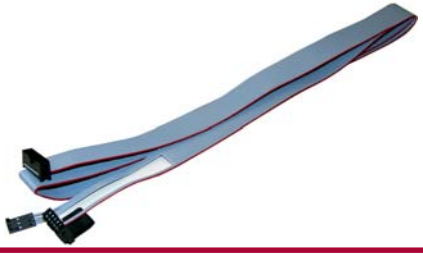
HC8 SENSOR MODULE CABLE KIT

HC8 Sensor Module Cable Kit



2x5 Leads CCTALK CABLE KIT

2x5 Leads CCTALK Cable Kit



9V X8PS TL21 CABLE KIT

9V X8PS Cable Kit

5V P8PS TL21 CABLE KIT

5V P8PS Cable Kit

5-V P8PS TL21 TELEPHONY KIT

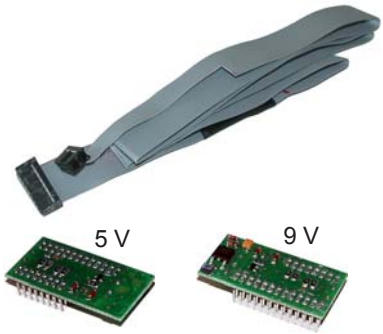
P8PS Coin Validator connection cable
5-V telephony adapter card

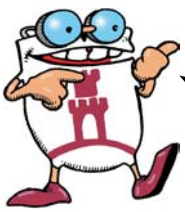
9-V X8PS TL21 TELEPHONY KIT

X8PS Coin Validator connection cable
9-V telephony adapter card

5-V/9-V TL21 TELEPHONY KIT

L86PS Coin Validator connection cable
L86 Dual Coin Validator connection cable
SA56 Coin Validator connection cable
S81PS Coin Validator connection cable
L86PS Coin Validator connection cable
P8PS Coin Validator connection cable
X8PS Coin Validator connection cable
9-V telephony adapter card
5-V telephony adapter card





IN ORDER TO GET UPDATED INFORMATION ON THE AVAILABILITY AND REFERENCE NUMBERS OF COMPLEMENTS AND ACCESSORIES, CONTACT THE COMMERCIAL DEPARTMENT OF AZKOYEN MEDIOS DE PAGO S.A.

2.6 LIST OF COMPLEMENTS AND ACCESSORIES

The Basic Kit that comes with the **TL21** provides the adapter card for standard and S81 Coin Validators.

In order to program/identify a certain Coin Validator, it is only necessary to have, in addition to the Basic Kit, the Kit indicated in the «Necessary Kit» column.

Additional kits of cable replacements are also available.

There is likewise a «**5-V/9-V Telephony Kit**» that provides everything necessary for programming/identifying all telephony Coin Validators (+5 V/ +9 V).

SELECTOR	NECESSARY KIT (Adapter card + cable)	ADDITIONAL KITCABLE REPLACEMENT	
L66S		Standard and S81 Cable Kit	STANDARD
LS6		Standard and S81 Cable Kit	
ES525 BDTA	ES525 INDOR/KOMBI Cable Kit	ES525 INDOR/KOMBI Cable Kit	
ES525 UK	ES525 UK Cable Kit	ES525 UK Cable Kit	
LV5		Standard and S81 Cable Kit	
LV5 KitInverted Power Supply	Standard Cable KitInverted Power Supply	Standard Cable KitInverted Power Supply	
L66S cctalk 1 Wire	L66S cctalk 1 Wire Cable Kit	L66S cctalk 1 wire Cable Kit	
Sensor HC08	HC8 Sensor Module Cable Kit	HC8 Sensor Module Cable Kit	
A6	Standard Cable KitInverted Power Supply	Standard Cable KitInverted Power Supply	
A6 TOT	A6 Totalizator Cable Kit	A6 Totalizator Cable Kit	
A6 cctalk	2x5 Leads CCTALK Cable Kit	2x5 Leads CCTALK Cable Ki	
Z6	ES525 UK Cable Kit	ES525 UK Cable Kit	
Z6 cctalk	2x5 Leads CCTALK Cable Kit	2x5 Leads CCTALK Cable Kit	
XV	Standard Cable KitInverted Power Supply	Standard Cable KitInverted Power Supply	
X6		Standard and S81 Cable Kit	
Z Kombi	ES525 BDTA Cable Kit	ES525 BDTA Cable Kit	
C6	A6 Totalizator Cable Kit	A6 Totalizator Cable Kit	

SELECTOR	NECESSARY KIT (Adapter card + cable)	ADDITIONAL KITCABLE REPLACEMENT	
L86S DUAL	9-V DUAL Telephony Kit	9-V DUAL Telephony Cable Kit	9V TELEPHONY
L86SPS	9-V PS Telephony Kit	9-V PS Telephony Cable Kit	
LS8	9-V DUAL Telephony Kit or 9-V PS Telephony Kit	Standard and S81 Cable Kit	
A8PS	9V X8PS Telephony Kit	9V X8PS Telephony Cable Kit	
SA56S	9-V SA56 Telephony Kit	9-V SA56 Telephony Cable Kit	
LS8PS	9-V PS Telephony Kit	9-V PS Telephony Cable Kit	
L86S	9-V DUAL Telephony Kit or 9-V PS Telephony Kit	Standard and S81 Cable Kit	
SA54N	9-V SA56 Telephony Kit	9-V SA56 Telephony Cable Kit	
N2G	9-V DUAL Telephony Kit	9-V DUAL Cable Telephony Kit	
X8	9-V DUAL Telephony Kit or 9-V PS Telephony Kit	Standard and S81 Cable Kit	
X8 PS	9V X8PS Telephony Kit	9V X8PS Telephony Cable Kit	
X8 Dual	9V DUAL Telephony Kit	9V DUAL Telephony Cable Kit	
S81	5-V S81 Telephony Kit	Standard and S81 Cable Kit	5V TELEPHONY
S81PS	5-V S81PS Telephony Kit	5-V S81PS Telephony Cable Kit	
S82NS	5-V S81PS Telephony Kit	5-V S81PS Telephony Cable Kit	
P8	5V y S81 Telephony Kit	Standard and S81 Cable Kit	
P8PS	5V P8PS Telephony Kit	5V P8PS Telephony Cable Kit	
EXACTOR Payout Unit	Payout Unit TL21 Cable Kit	Payout Unit TL21 Cable Kit	
AN8000 Payout Unit	Payout Unit TL21 Cable Kit	Payout Unit TL21 Cable Kit	

3. OBTAINING FILES VIA INTERNET (WEB PAGE & E-MAIL)

A system has been developed for access via Internet to the files that contain the information on the new programming. It is a web page application that facilitates user requests for these files.

In order to be able to use this method, it is necessary to have an Internet connection, authorised access to the web page of **AZKOYEN Medios de Pago S.A.** and have an e-mail account for receiving the files with the data on the new programming for Coin Validators. Access authorisation is provided through the commercial network of **AZKOYEN**.

The procedure for making the Internet request is performed by simply navigating through the various web pages, wherein the necessary requisites and data for obtaining the files are completed in detail.

3.1 USER VALIDATION

On this first screen, it is necessary to fill in the «User» and «Password» fields in order to be validated and have access to the process.

Moreover, from this screen it is possible to select the language used on the web pages, and it allows consulting the rest of the **GRUPO AZKOYEN** web page.

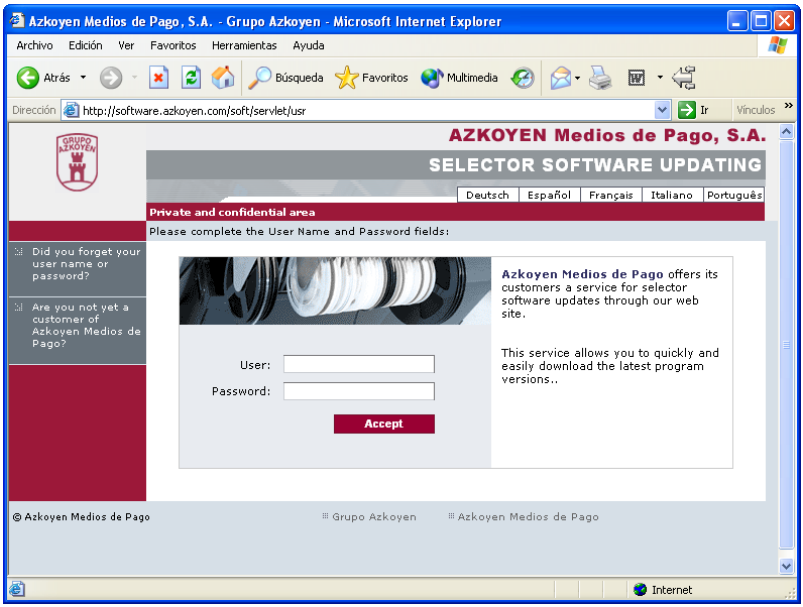

Azkoyen Medios de Pago, S.A. - Grupo Azkoyen - Microsoft Internet Explorer
Archivo Edición Ver Favoritos Herramientas Ayuda
Atrás Búsqueda Favoritos Multimedia
Dirección http://software.azkoyen.com/soft/servlet/usr
Ir Vínculos
AZKOYEN Medios de Pago, S.A.
SELECTOR SOFTWARE UPDATING
Deutsch Español Français Italiano Português
Private and confidential area
Please complete the User Name and Password fields:
Did you forget your user name or password?
Are you not yet a customer of Azkoyen Medios de Pago?
Azkoyen Medios de Pago offers its customers a service for selector software updates through our web site.
This service allows you to quickly and easily download the latest program versions..
User:
Password:
Accept
© Azkoyen Medios de Pago
Grupo Azkoyen
Azkoyen Medios de Pago
Internet

Figure 12. *User Validation Screen.*

3.1.1 USER PROFILE:

Users can change their profile any time if they wish. This profile is determined by the following fields:

- ✓ New e-mail.
- ✓ Current password.
- ✓ New password.
- ✓ Confirm password.

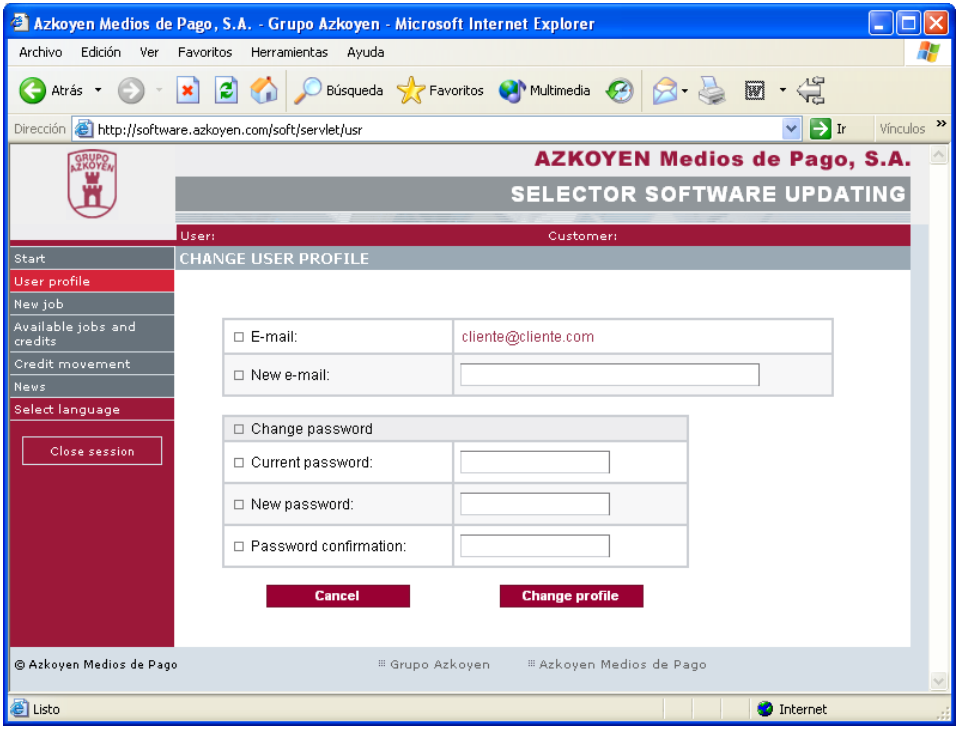


Figure 13. *User Profile Screen.*

The «Change Profile» option stores the changes that are made and reports possible errors that may have occurred, including the reason for the same:

- ✓ The indicated e-mail address is incorrect.
- ✓ Current password incorrect.
- ✓ The «New Password» and «Password Confirmation» fields contain different data.

3.2 REQUEST FOR FILES

The request for files for reprogramming Coin Validators can be made in two different ways:

- ✓ **The creation of or request for a new job** using the «New Job» option.
- ✓ **The request for files** that were processed correctly in previous requests using the «Available jobs and credits» option.

3.2.1 NEW JOB

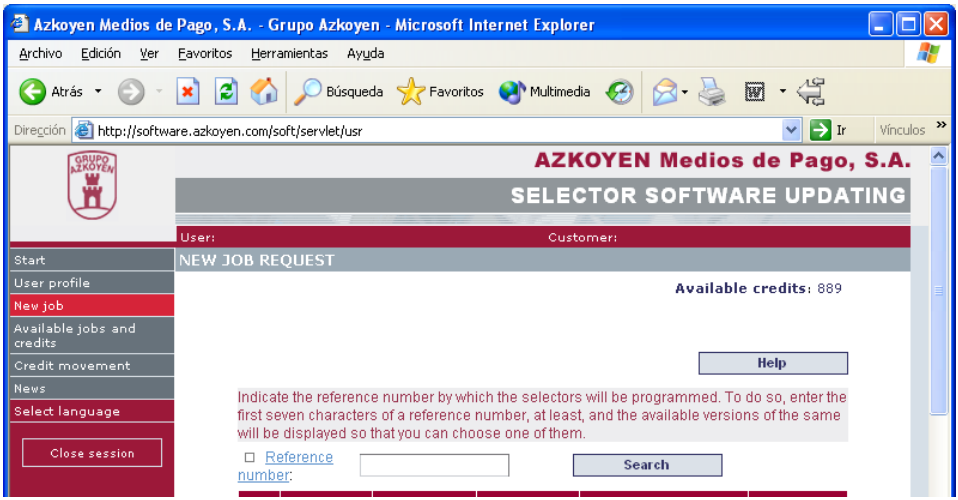

Azkoyen Medios de Pago, S.A. - Grupo Azkoyen - Microsoft Internet Explorer
Archivo Edición Ver Favoritos Herramientas Ayuda
Atrás Búsqueda Favoritos Multimedia
Dirección http://software.azkoyen.com/soft/servlet/usr
Ir Vínculos
AZKOYEN Medios de Pago, S.A.
SELECTOR SOFTWARE UPDATING
User: Customer:
Start
User profile
New job
Available jobs and credits
Credit movement
News
Select language
Close session
NEW JOB REQUEST
Available credits: 889
Help
Indicate the reference number by which the selectors will be programmed. To do so, enter the first seven characters of a reference number, at least, and the available versions of the same will be displayed so that you can choose one of them.
Reference number:
Search

Figure 14. *New Job Request Screen.*

In order to request files with the new programming, the «New Job» option must be selected. A form is displayed in which the following fields must be filled in:

- ✓ **Program reference.**

  At least the first seven digits of the reference must be entered. In addition to the references that coincide with the number entered, the search option shows all references that are compatible.

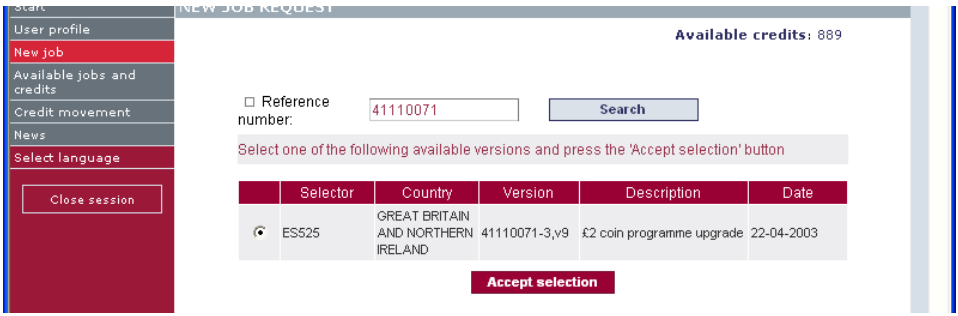


Figure 15. *Reference Search Screen.*

✓ **Serial number of the Coin Validators to be reprogrammed.**

This is where the serial number of the Coin Validator to be reprogrammed is entered.

More than one serial number can be entered using the «Read serial numbers from file» option. This option allows loading a TXT or CSV type of file that contains the desired serial numbers.

✓ **E-mail**

This is where the e-mail address is entered that will be used for receiving the files. By default, the one assigned in the user profile appears.

✓ **Mail language.**

This is where the desired language for receiving the e-mail is entered. By default, the language assigned on the navigation page appears.

✓ **Job description.**

A comment that describes the requested job should be entered here.

✓ **Desired file format.**

This is where the desired file format is indicated. The options are the following:

- PGS from Azkoyen.
- BIN from Siemens.
- PRO from Telefónica.

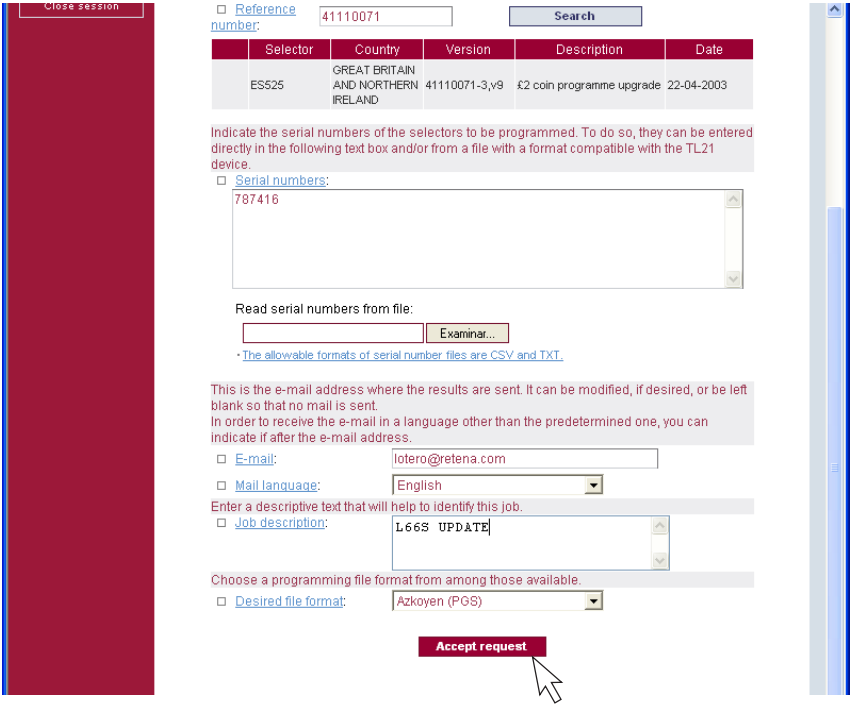

Close session
Reference number:
41110071
Search
Selector
Country
Version
Description
Date
ES525
GREAT BRITAIN AND NORTHERN IRELAND
41110071-3,v9
£2 coin programme upgrade
22-04-2003
Indicate the serial numbers of the selectors to be programmed. To do so, they can be entered directly in the following text box and/or from a file with a format compatible with the TL21 device.
Serial numbers:
787416
Read serial numbers from file:
Examinar...
The allowable formats of serial number files are CSV and TXT.
This is the e-mail address where the results are sent. It can be modified, if desired, or be left blank so that no mail is sent.
In order to receive the e-mail in a language other than the predetermined one, you can indicate if after the e-mail address.
E-mail:
lotero@retena.com
Mail language:
English
Enter a descriptive text that will help to identify this job.
Job description:
L66S UPDATE
Choose a programming file format from among those available.
Desired file format:
Azkoyen (PGS)
Accept request

Figure 16. *New Job Request Screen.*

Once these data are completed, click on «Accept.» If everything is correct, a confirmation message appears. Then click on «Accept» again.

The requested job is now being processed. If the request has been made correctly, the requested file will automatically be sent to the configured e-mail address.

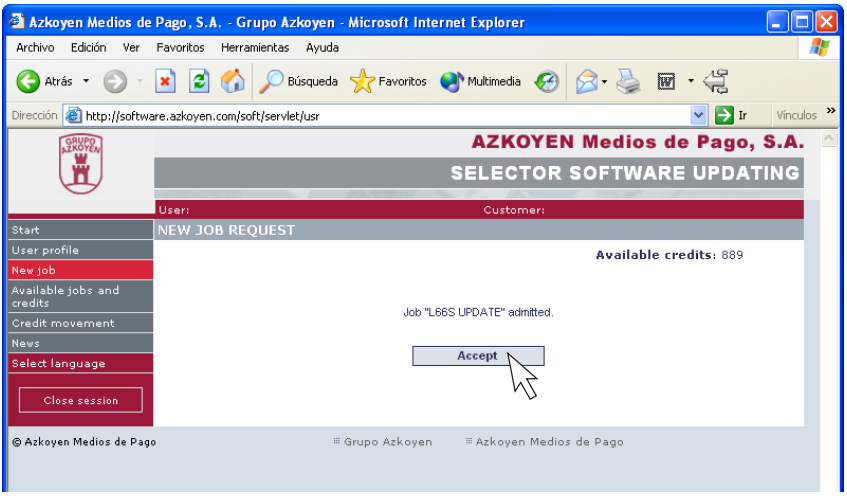


Figure 17. *New Job Request Acceptance Screen.*

3.2.2. AVAILABLE JOBS AND CREDITS

The «Available Jobs and Credits» option allows administering all jobs performed.

It is possible to view all user jobs or the jobs of our customer account, given that there may be various users assigned.

It is likewise possible to constantly view the number of «credits» available for making updates.

Figure 17. *Available Jobs and Credits Screen.*

The list of jobs shows the status of each job. These statuses can be the following:

- ✓ **Cancelled.** This system has cancelled the request. It must be requested again.
- ✓ **Waiting.** The request will start being processed shortly.
- ✓ **Processing.** The application is searching for the requested programming in the database.
- ✓ **Processing OK.** The requested programming is available.
- ✓ **Processing ERROR.** The required programming is not available in the database.

By clicking on the desired job number, a page is displayed with the complete details of the same.

If desired, the files processed in previous requests can again be downloaded or received by e-mail from this page.

These options are only activated if the job has been processed correctly.

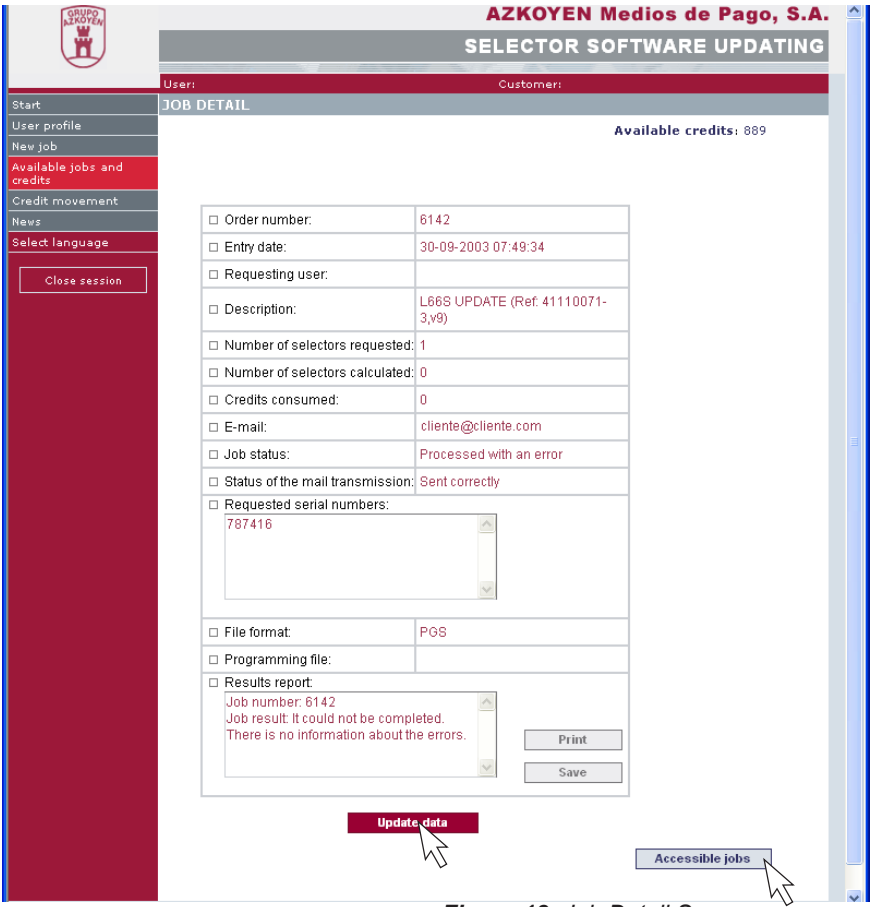


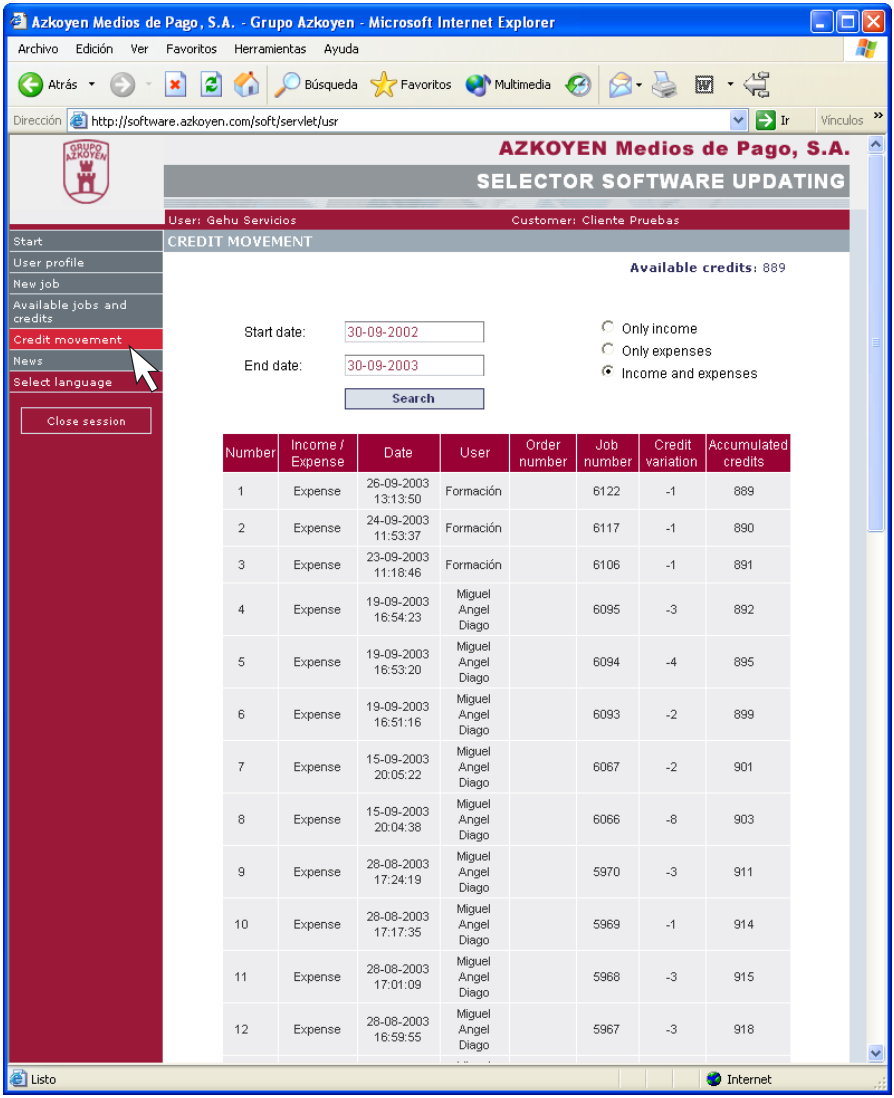
Figure 18. *Job Detail Screen.*

3.3 OTHER OPERATIONS

3.3.1 CREDIT MOVEMENT

This option provides access to all credit movements in our customer account.

Searches can be made based on a date range and filtered by income and expense.



Number	Income / Expense	Date	User	Order number	Job number	Credit variation	Accumulated credits
1	Expense	26-09-2003 13:13:50	Formación		6122	-1	889
2	Expense	24-09-2003 11:53:37	Formación		6117	-1	890
3	Expense	23-09-2003 11:18:46	Formación		6106	-1	891
4	Expense	19-09-2003 16:54:23	Miguel Angel Diago		6095	-3	892
5	Expense	19-09-2003 16:53:20	Miguel Angel Diago		6094	-4	895
6	Expense	19-09-2003 16:51:16	Miguel Angel Diago		6093	-2	899
7	Expense	15-09-2003 20:05:22	Miguel Angel Diago		6067	-2	901
8	Expense	15-09-2003 20:04:38	Miguel Angel Diago		6066	-8	903
9	Expense	28-08-2003 17:24:19	Miguel Angel Diago		5970	-3	911
10	Expense	28-08-2003 17:17:35	Miguel Angel Diago		5969	-1	914
11	Expense	28-08-2003 17:01:09	Miguel Angel Diago		5968	-3	915
12	Expense	28-08-2003 16:59:55	Miguel Angel Diago		5967	-3	918

Figure 19. *Credit Movement Screen.*

3.3.2 LANGUAGE SELECTION

At any time during the session, the language of the web pages can be changed by selecting a language from among those available at that time.

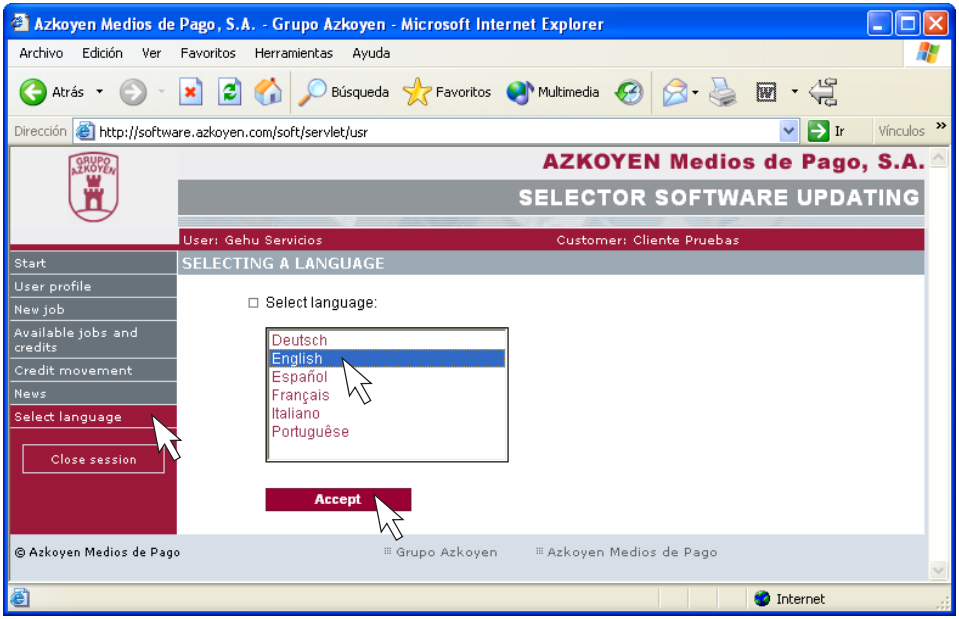


Figure 20. *Language Selection Screen.*

3.3.3 CLOSE SESSION

This option securely closes the job session.

For security reasons, the job sessions are closed automatically after 15 minutes if no operation is performed.

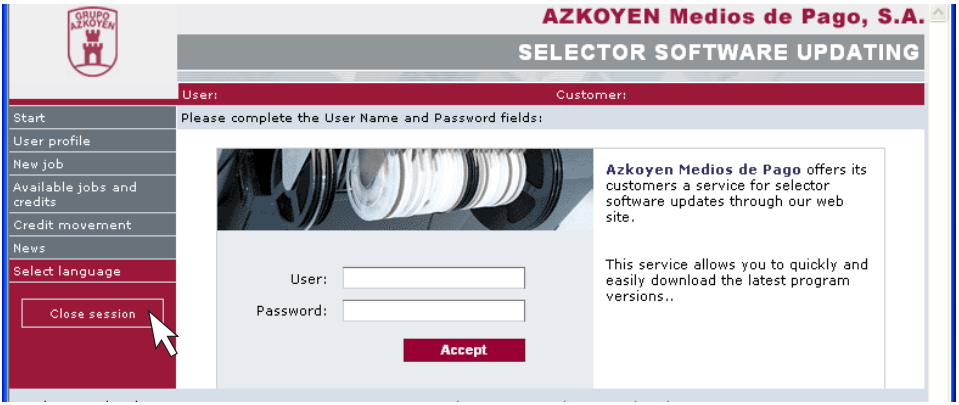


Figure 21. *Close Session.*

AZKOYEN Medios de Pago, S. A.
Avda. San Silvestre s/n
Tel. 948 709 709 - Fax 948 709 785
31350 Peralta (Navarra) - SPAIN